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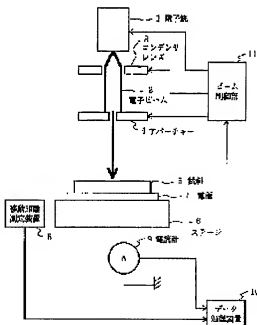
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(54) SEMICONDUCTOR DEVICE INSPECTING DEVICE

(57)Abstract:

PROBLEM TO BE SOLVED: To inspect a detailed shape of a contact hole and an internal state of a semiconductor device by non-destructive manner, by more improving technique for detecting a board current generated by irradiation of an electron beam.

SOLUTION: A specimen 5 is irradiated with parallel electron beams 2, and a current flowing in the specimen 5 is measured with an ammeter 9. Acceleration voltage of the electron beams 2 is changed, and measurement is repeated. In data processing equipment 10, information regarding a structure in the depthwise direction of the specimen 5 is obtained from difference of transmittance of the electron beams 2 to the specimen 5 which is

caused by difference of the acceleration voltage.

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